SMART CARD ENCODER

(EC 5000)

User's manual

SALTO

inspired access

Introduction

The Salto Smart Card Encoder (EC5000), is used to write access control information onto the chip integrated in a contact smart card. It is also used to read information from a cards memory. The encoder is used in conjunction with the following Salto equipment to manage a complete access control system:

1. Salto Rw access control software.
2. Smart electronic escutcheons.
3. Smart Cards
4. Smart portable programming device. PPD500

(There are 2 manuals for the RW software and one for the Smart PPD, which you will find in this same CD-Rom).

Encoder connections

The Smart Encoder has 2 connectors:

1. **Female jack for 12 V DC power supply:** to connect the power source, which has the following specification:

   INPUT: 220 V AC, 50 Hz,
   OUTPUT: 12 V DC. 500 mA.

2. **Serial cable to allow communication with the PC:** this cable has a female DB-9 connector on one end, which must be plugged to the serial port in the computer that has the Salto RW software installed on it.

How to insert SMART Cards

During the set up of a data base on the Salto RW software, the program will sometimes ask you to insert a Smart Card into the Encoder. At this point, once the Smart Card has been inserted, the reading/writing action will take place, then the program will ask you to remove the card.

Never remove the card during the encoding procedure. Wait until the system asks you to do so.

The right way of inserting a card is shown in the following images. First of all you must insert the card with the golden chip facing the gold emblem on the reader which represents the chip.

Push the card fully home and leave it inserted until the system asks you to remove it.

General use

You can see listed below the operations from the Salto RW software for which the Salto encoder is required;

1. To read a card.
2. To delete a card.
3. To do a check in.
4. To copy a guest card.
5. To edit a guest cancel card.
6. To edit a programming card / spare cards.
7. To assign cards to users (the installation staff).

For the explanation of these operations, follow the instructions in the RW access control software manual.

Generally, cards will be edited one by one, but spare cards may be edited in series, until you have as many spare cards as you require.

Encoders Alerts.

The Smart Card encoder has an LED (Light Emitting Diode) mounted on it and an audible tone generator. During its use the LED will light and the sounder beep. Below is a list of the signals and their meanings;

1. **Green slow flashing light:** Waiting for Card insertion.
2. **Fixed green light:** Successfully finished operation.
3. **Green fast flashing light:** Processing data.
4. **Fixed red light:** Error, finished operation.

(Every LED signal will also have an acoustic signal).

The sounder can be disabled in the RW software. (see the RW software manual for an explanation of this).

Card types accepted

There are three types of Salto smart card that can be used with the Salto encoder

1. **MC0256 card, blue:** access to memory protected by password. It is recommended that these cards be used in a standard security environment.

2. **MCP192 card ,red:** access to memory protected by authentication. It is recommended that these cards are used in a high security environment.

3. **MCP02K card, yellow:** access to memory protected by authentication. It is recommended to be given to the system management staff (not for system guest) due to its large memory capacity of 2K.

Note that user specified graphical card designs are possible (contact Salto for details).

Maintenance

The only maintenance the Smart encoder needs is to clean it with a damp cloth, being careful that no liquid goes into the Smart Card reader slot. Please, do not use abrassive soaps or solvents.

When the encoder is not going to be used for a long period of time, it is recommended that the power supply be disconnected.

Technical features

The technical features of the Smart Encoder are:

- Power consumption: 200mW
- INPUT voltage: 12 V DC
- Case material: Grey polyester.
- Weight: 480 gr.
- Dimensions: 70 x 82 x 150mm.
- Package dimensions: 220 x 310 x 83mm.